Amendments to the Claims:

This listing of claims will replace all prior versions
and listings of claims in the application.

Listing of Claims:

1.   (Currently Amended) A disk apparatus for reading and
writing data to a storage medium, wherein:

said disk apparatus comprises:

a storage means for storing pieces of defective track
information into areas at respective addresses each
corresponding to physical track number information, with each
piece of the defective track information indicating existence
of defective tracks in a plurality of tracks, and for storing
pieces of defect information in predetermined groups, with
each piece of the defec~~t~~ive track information indicating
information on a defective track in said plurality of tracks;
and

a processing means for receiving an instruction of read
or write to a track of said storage medium, for referring to
said storage means, and for performing defect processing on a
defective track~~; and~~, wherein

said storage means stores pieces of pointer information
for groups of said pieces of defective track information, with
each piece of the pointer information indicating a start

address of ~~an~~ a storage area for each of said predetermined

groups~~;~~, and

when said processing means receives an instruction of

read or write to a track of said storage medium, said

processing means refers to a piece of said defective track

information based on said addresses, and then, when existence

of a defective track is indicated, refers to a piece of

pointer information for a group to which said piece of the

defective track information belongs, accesses the pieces of

defect information on defective tracks sequentially from a

storage area indicated by said piece of pointer information,

detects defect information when the track as an object of said

instruction is a defective track, and performs defect

processing on said defective track based on said defect

information.

2.   (Currently Amended)   The disk apparatus according to

Claim 1, wherein:

said storage means stores, ~~as said~~ for each said piece of

defect information, physical track number information on said

defective track, information indicating a method of the defect

processing, and a storage capacity of said piece of defect

information or an end location of a storage area for said

piece of defect information.

    3. (Currently Amended) The disk apparatus according to

Claim 1, wherein:

said disk apparatus further comprises a holding means for

holding a number of said plurality of tracks corresponding to

one piece of defective track information; and

said number held by said holding means is set from ~~an~~

outside of the holding means.

    4. (Original) The disk apparatus according to Claim 1,

wherein:

said processing means accesses a storage area for said

defective track information, according to an address obtained

by adding a predetermined base address to an address

corresponding to said physical track number information.

    5. (Currently Amended) A disk apparatus for reading and

writing data to a storage medium, ~~wherein:~~

~~said disk apparatus comprises~~ comprising:

a storage means that has an area in which pieces of

physical track number information on defective tracks are

stored into areas at respective addresses corresponding to

said pieces of physical track number information, and an area

in which pieces of defect information on said defective tracks

are stored; and

a processing means for receiving an instruction of read

or write to a track of said storage medium, for referring to

said storage means, and for performing defect processing on a

defective track~, wherein

~~and~~

said storage means stores said pieces of physical track

number information on defective tracks and pieces of pointer

information indicating addresses of areas at which pieces of

defect information on said ~~pieces of~~ defective track_s_ are

stored~, and

when said processing means receives an instruction of

read or write to a track of said storage medium, said

processing means refers to a piece of said physical track

number information on defective tracks based on said

addresses, and then, when said track as an object of said

instruction is a defective track, refers to a piece of said

pointer information, ~~detects~~to detect a piece of the defect

information at a storage area indicated by said piece of the

pointer information, <u>said piece of defect information having a</u>

<u>plurality of formats for processing a plurality of defects,</u>

and performs defect processing on said defective track based

on said piece of the defect information.

6.   (Original)   The disk apparatus according to Claim 5,

wherein:

said storage means partitions a storage area into

partition areas each corresponding to a plurality of tracks,

and further stores pieces of identification information on

said partition areas; and

said processing means accesses each of said partition

areas each corresponding to a plurality of tracks.

7.   (Currently Amended)   A disk apparatus for reading and

writing data to a storage medium, ~~wherein:~~

~~said disk apparatus comprises~~ comprising:

a storage means for storing pieces of physical track

number information on defective tracks and pieces of defect

information on said defective tracks into areas at respective

addresses corresponding to said pieces of physical track

number information; and

a processing means for receiving an instruction of read

or write to a track of said storage medium, for referring to

said storage means, and for performing defect processing on a

defective track~, wherein

when said processing means receives an instruction of

read or write to a track of said storage means, said

processing means refers to a piece of said physical track

number information on defective tracks based on said

addresses, to detect a piece of the defect information, and

then, when said track as an object of said instruction is a

defective track, performs defect processing on said defective

track based on said piece of the defect information, said

pieces of the defect information having a plurality of formats

for processing a plurality of defects.

8.   (Currently Amended)   The disk apparatus according to

Claim 7, wherein:

said storage means stores a volume of each piece of said

defect information, before and after in a head portion and a

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end portion of each said ~~each~~ piece of the defect information;
and

said processing means sequentially accesses said pieces
of defect information ~~forward and backward~~.

9.   (Original)   The disk apparatus according to Claim 1,
wherein:

said defect processing performs at least either of
skipping processing, in which a defective sector is replaced
by a normal sector, and slipping processing, in which a
defective sector is replaced by a normal sector that
physically follows said defective sector.

10.   (Original)   The disk apparatus according to Claim 5,
wherein:

said defect processing performs at least either of
skipping processing, in which a defective sector is replaced
by a normal sector, and slipping processing, in which a
defective sector is replaced by a normal sector that
physically follows said defective sector.

11.   (Original)   The disk apparatus according to Claim 7,

wherein:

said defect processing performs at least either of

skipping processing, in which a defective sector is replaced

by a normal sector, and slipping processing, in which a

defective sector is replaced by a normal sector that

physically follows said defective sector.

12.   (New) A disk apparatus according to claim 5,

wherein:

said pieces of defect information consist of control

information and control contents, and

said processing means grasps the format of the data for

defect processing based on the control information and

performs control processing in accordance with the format,

whereby the defect processing on the defective tracks is

performed based on the defect information.

13.   (New)   A disk apparatus according to claim 7,

wherein:

said pieces of defect information consist of control

information and control contents, and

said processing means grasps the format of the data for

defect processing based on the control information and

performs control processing in accordance with the format,

whereby the defect processing on the defective tracks is

performed based on the defect information.

14.   (New)   A disk apparatus according to claim 5,

wherein:

said format contains a sequential number of sectors as an

object of the defect processing a plural number of times.

15.   (New)   A disk apparatus according to claim 7,

wherein:

said format contains a sequential number of sectors as an

object of the defect processing a plural number of times.